

SECRET OF CHANGING METALS DISCOVERED

Transmutation Is Accomplished by Dr. G. L. Wendt and C. E. Iron.

LONG SEARCH ENDED

Tungsten Transformed Into Helium Through Intense Heat.

VAST FIELD IS OPENED

Announcement Made at Chemical Society Meeting at Northwestern University.

CHICAGO, March 11.—Transmutation of metals, sought throughout the ages, finally has been accomplished, it was announced in a paper read to-day at a meeting of the middle Western sections of the American Chemical Society at Northwestern University.

Tungsten, which is used in the filaments of electric light bulbs, has been definitely and permanently changed into another element, helium, through treatment in temperatures of between 50,000 and 60,000 degrees, it was declared in a report on experiments conducted by Dr. Gerald L. Wendt and C. E. Iron, working at the University of Chicago.

"It means that the alchemists who tried to turn the baser metals into gold were right on one point—that the nature of metals could be changed," said Dr. Paul N. Leach of the Chicago section of the Chemical Society in commenting on the paper. "But, of course, it has nothing to do with the assertions of alchemists that the baser metals can be transmuted into synthetic gold."

"It does, however, actually blast the theory that the atoms of elements, supposed to be absolutely indestructible, cannot be broken up by men. It opens a vast new field to science and may result in many far reaching and important scientific developments. We cannot yet foresee what these developments may be."

"Up until 1895 it was believed that no decomposition of elements was possible. At that time, however, it was discovered that radium, which is one of about ninety known elements, naturally decomposes into lead. Nature, however, performs that change, and until Dr. Wendt and Mr. Iron completed their experiments, man had never been able to produce a similar result."

"The heat developed to break down the tungsten atoms and change them into helium is the greatest ever known—

New York Assay Office Getting Gold Out of Air

WASHINGTON, March 11.—Getting gold out of the air is being attempted by the Government at the New York Assay Office, according to a statement by Director of the Mint Baker. Tests of a new process are being carried on there, he declared, by which the air, smoke and dust which escape from the molten gold and carry off minute particles of the precious metal can be refined so that none of the gold is lost.

Good progress is being made in the tests, he declared, and it is thought that a considerable saving to the Government will result from the new process, while extension of the method to commercial plants should make possible the utilization of all gold employed in manufacturing.

hotter than the sun or than the hottest star known to astronomers. The heat of molten steel is about 2,000 degrees, the temperature of the sun is about 9,000 degrees, and of some of the hottest stars is about 30,000 degrees.

"But these scientists, by means of 'artificial lightning,' such as Dr. Charles P. Steinmetz recently produced, have developed the hottest known spot in the universe."

"Astronomers have long known that while in general the materials which compose the sun and stars are the same as those known on earth, the list of substances and chemical elements becomes shorter and shorter when the hotter stars are examined."

"On the brilliant white or bluish stars, which are masses of gas at about 20,000 degrees, only the simplest elements are present. They seem to consist entirely of the gases, hydrogen and helium. The heavier metals, such as iron, are not present."

"To determine whether this was due to decomposition by great heat, Wendt and Iron reproduced conditions such as are on the stars and succeeded in reaching a temperature twice as high as that of the hottest star and found that ordinary metals are decomposed into the simple gases, particularly helium."

"The method used was the same as that used in producing artificial lightning, recently announced by Dr. Steinmetz of Schenectady, and was originated by Dr. J. A. Anderson of the Mount Wilson solar observatory at Pasadena, Cal."

"It consists in charging a large electrical condenser to 100,000 volts and discharging this large quantity of electricity at high speed through an extremely fine wire. The wire explodes with a deafening report, as if struck by lightning, which, in a minor way, it is. The flash is about 200 times as bright as direct sunlight, but it lasts less than a hundred-thousandth of a second."

"The pressure developed is about 1,000 pounds per square inch and the temperature is momentarily over 50,000 degrees Fahrenheit. Under such conditions the atoms which compose the wire decompose into simpler ones and the result is the change of metallic tungsten into gaseous helium."

"One of the first laws of chemistry has been that the so-called elements are permanent and unchangeable. The failure of the alchemists, after centuries of efforts, to change such common metals as copper and iron into gold convinced scientists that the metals could not be decomposed."

"Great advances, as the result of the work of Wendt and Iron, in discoveries on the nature of the matter that com-

poses the universe are confidently predicted."

Dr. Wendt was born in 1891. He was educated at Harvard and in Paris. He was for a time engaged by the United States Bureau of Mines to work on radium production in Colorado. He was a captain in the chemical warfare service and since the war has been associate professor of chemistry at the University of Chicago.

ITALY WILL OPPOSE FIUME DICTATORSHIP

Premier Objects to Deputy Giuriati Retaining It.

Special Cable to THE NEW YORK HERALD. Copyright, 1922, by THE NEW YORK HERALD. New York Herald Bureau. Home, March 11.

Foreign Minister Schanzer intends to follow former Foreign Minister Storza's precedent respecting the Rapallo treaty concerning the independence of Fiume and desires friendly relations with Yugoslavia. His associates say he has defined his policy in a meeting of the Cabinet and that he is opposed to any step which would prejudice the Powers against Italy, anything especially that would provoke the French in coming conferences.

In line with this policy it is believed in well informed circles that the Italian Government will not favor the retention by Signor Giuriati of the virtual dictatorship in Fiume. The fact that he is a Deputy in the Italian Parliament and a former chief of staff for Gabriele d'Annunzio might provoke international complications, it is thought, and arouse doubts as to Italy's good intentions in handling the Fiume situation. The Epoca also points out that he cannot have two allegiances. If he accepts the Fiume office the Committee on Privileges of the Chamber will be forced to declare his seat vacant.

Franklin Simon & Co.
FIFTH AVENUE

The
Wrap-Around
BURMESE
TURBAN
15.75

Inspired by The
Prince of Wales'
Visit to India...

MILLINERY SHOP
Street Floor

SOVIET PREPARES BANK AGREEMENT

Krassine Says One Is Ready for Relations With Guaranty Trust Company.

Moscow, March 11.—Leonid Krassine, Commissary for Foreign Trade in the Soviet Government, is quoted in an interview published in the local newspapers as declaring that an agreement had been "prepared" with the Guaranty Trust Company of New York for banking relations with the New State Bank of Russia.

"Our most concrete plan," said M. Krassine, "is the organization of our own bank in England. We have reached a preliminary agreement guaranteeing us the support of the Bank of England,

but we are withholding the opening of our bank until political recognition has been accorded the Soviet Government. We have also reached an agreement with Lloyd's Bank for normal relations with the State Bank."

M. Krassine said Soviet Russia had done little in the way of credit operations, principally because the short terms offered were considered dangerous for Russia.

Charles H. Sabin, chairman of the board of the Guaranty Trust Company, said officials of that institution "had been approached by Russian representatives with the suggestion that we make the same arrangements with Russian banks for remittances from this country to Russia which we now have operating with Poland, but no such arrangements have been concluded."

This statement was made by Mr. Sabin when he was questioned regarding a Moscow dispatch quoting the Soviet Commission for Foreign Trade as having said that an agreement had been prepared with the Guaranty Trust Company for banking relations with the New State Bank of Russia.

FRANCE STANDS TO LOSE ON A. E. F. STOCKS

Rise in Exchange Makes Cost 350,000,000 Francs More.

Special Cable to THE NEW YORK HERALD. Copyright, 1922, by THE NEW YORK HERALD. New York Herald Bureau. Paris, March 11.

France has lost on her purchase of the stocks left in this country by the American Expeditionary Force, unless repayment is made after the exchange rate goes back to seven francs to the dollar, the rate obtaining when the transaction was made. Even under that rate France will just about "break even."

Lucien Dior, the Minister of Commerce, replying to a Senatorial query, declared that the sale of army stocks up to February of this year totaled 3,141,444,000 francs. France had expected a more rapid stabilization of exchange, which would have enabled her to pay only 2,800,000,000 to cover the purchase price of \$400,000,000 set by the American Government. With exchange now at 11 francs to the dollar, and possibly higher than that, France's debt to the United States on this account, with-

out considering interest, amounts to 4,350,000,000 francs.

Financial experts have calculated that even a gradual improvement in exchange will be no more than sufficient to meet the interest charges, and that when the books are balanced finally it will be found that the only satisfaction France will have had is the employment given the thousands of intermediaries in the transactions and the altruistic assistance rendered to French and some American middlemen in plugging fortunes at the nation's expense.

ALLEGED MURDERERS OF ERZBERGER HELD

Special Cable to THE NEW YORK HERALD. Copyright, 1922, by THE NEW YORK HERALD. Vienna, March 11.—Two men alleged to be the murderers of Matthias Erzberger were arrested in Steiermark, Hungary, and taken to Budapest. They pretended to be Austrians but afterward were proved to be Germans and admitted that they were in Germany at the time of Erzberger's assassination, but miles away from the scene of the crime. The police have photographs in their records which bear a striking similarity to the two suspects.

FRANCE WILL BEGIN NAVY RECONSTRUCTION

Special Cable to THE NEW YORK HERALD. Copyright, 1922, by THE NEW YORK HERALD. New York Herald Bureau. Paris, March 8.

The result of the session of the Senate's Naval and Foreign Affairs Committee, at which Premier Poincaré and M. Raiberti, Minister of Marine, gave the essential details of the Washington conference, indicates that the French intention is to begin a program of naval reconstruction as soon as the Washington ratification is effected and without waiting for ratification by the French Parliament.

This program, M. Raiberti declared, must not be delayed, as France's capital ships will be useless after 1925, while the majority of smaller cruisers will be virtually so after 1925. He estimated the cost of building light cruisers and submarines to complete the navy as scheduled at Washington at approximately 785,000,000 francs.



FRANKLIN SIMON & CO



A STORE OF INDIVIDUAL SHOPS

FIFTH AVENUE, 37TH AND 38TH STREETS, NEW YORK



LIGHT IN TINCTURE
SHEER IN TEXTURE

Tincture-Tone Sheer
Pure Silk Hose

Beige, "atmosphere,"
rose-beige, fume or
black; silk sole and top
3 pairs for 11.75 3.95

Openwork Clox Pure
Silk Hose

Openwork wide clox;
ingrain silk in beige,
gray, rose-beige or
black; high spliced
heel, silk sole and top
3 pairs for 11.15 3.75

Hand Embroidered Clox
Pure Silk Hose

Ingrain silk in black
with black or white
clox; white or gray with
black clox; taupe, navy
or African with white
clox; lisle sole and top
3 pairs 8.75 2.95

Silk From Top to Toe
Pointed Heel Hose

Ingrain silk in taupe,
silver, gray, African
brown, white, black;
silk sole and garter top
3 pairs for 8.75 2.95

Pointed Slipper Heel
Pure Silk Hose

Ingrain silk in beige,
gray, taupe, cordovan,
African, white or black;
lisle sole and garter top
3 pairs for 6.65 2.25

For Madame and Mademoiselle

PARFAIT PURE SILK STOCKINGS

Always Marked Lower

Now at Their Lowest Mark

PARFAIT PRICES ARE ALWAYS DOWN
BUT NEVER CUT FOR PARFAIT HOLDS
ITS REGULAR PRICES LOWER THAN
OTHER CUT PRICES—HOLDS ITS QUALITY
BY ETERNAL VIGILANCE—HOLDS ITS
FASHION BY ETERNAL CHANGE—AND
HOLDS ITS PATRONS INSTEAD OF HOLD-
ING SALES.

Parfait Hosiery Can Not Be Duplicated
at These Prices

PURE SILK STOCKINGS
UNAPPROACHED IN PRICE

Pure thread silk Parfait hose in
light weight or medium weight;
black, white or African brown;
with lisle sole and garter top

1.65

3 pairs for 4.90

EXCLUSIVE PRICED SHEER
PURE SILK STOCKINGS

Illustrating the latest hosiery
fashion in sheer pure silk hosiery,
in two fashionable shades of gray
and in black; lisle sole and top

2.25

3 pairs for 6.70

FAMOUS ORIGINAL PARFAIT
PURE SILK STOCKINGS

The hosiery upon which Parfait
bases its reputation; pure black
silk in medium or heavy weight;
with lisle sole and garter top

1.85

3 pairs for 5.50

ALL COLORS IN PURE
SILK STOCKINGS

Pure silk Parfait hosiery; rose-
beige, aluminum, lime, beige,
nickel, African, cordovan, black
or white; lisle sole and garter top

1.95

3 pairs for 5.80

FEMINE HOSE SHOP—Street Floor



Franklin Simon & Co.



Franklin Simon & Co.

A Store of Individual Shops
FIFTH AVENUE, 37th and 38th STS.



INTRODUCING FOR MADAME
THE ERA OF THE OVERCOAT
SPRING OVERCOATS
OF IMPORTED TWEEDS

The Overcoat is the Autocrat of Fashion,
and Tweed is the Autocrat
of the Overcoat

55.00

SIX DIFFERENT MODELS

All the mannish manner of an English mode, with
all the feminine charm of a Fifth Avenue Fashion

THE overcoat comes into its own as an
essential of feminine attire. Fifth
Avenue has built a mode for Madame of the
overcoat fashion and the overcoat fabric on
which custom tailors build their reputations.

ALL TWEEDS, ALL COLORS, ALL MODELS, ALL PRICES

From 39.50 to 89.50

WOMEN'S COAT SHOP—Fourth Floor

